Unified Area Command Plan

Deepwater Horizon MC252

Gulf-Wide Recovered Oil/Waste Management Plan

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Gulf Coast Incident Management Team Plan

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1 INTRODUCTION

The purpose of this plan is to describe oil recovery and waste management activities related to the Mississippi Canyon Block 252 (MC 252) Deepwater Horizon incident. Waste generation activities include: oil skimming and collection, shoreline clean-ups, decontamination of cleanup equipment, shoreline remediation, wildlife rehabilitation, as well as other activities related to oil spill cleanup. These activities will be managed under this Recovered Oil/Solid Waste Management Plan (hereafter referred to as the SWMP); as well as oil recovery/reclamation and recycling/reuse/recovery operations. This plan is intended to cover common gulf-wide waste activities recognizing there are also state-specific waste management requirements. Therefore, when following this plan it will be necessary to check the Appendices E through I for additional state requirements.

1.1 Background and Plan Scope

This plan is written at the request of the Incident Commander, the U.S. Coast Guard (USCG) Federal On-Scene Coordinator (FOSC), and the associated State On-Scene Coordinator (SOSC) for Mississippi, Alabama, Florida, Louisiana and Texas.

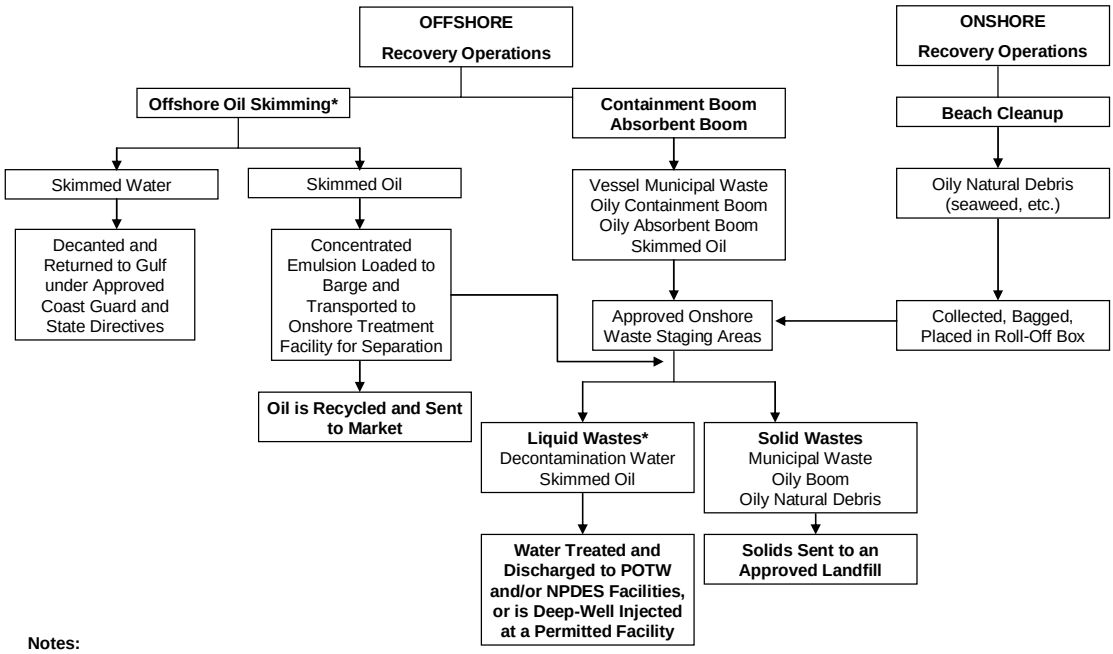
This SWMP outlines the waste management procedures and expectations to support proper waste classification, handling, staging, storage, manifesting, transportation, disposal/recycling of the waste generated from spill cleanup activities, and potential reuse/recycling opportunities. This SWMP will be implemented in accordance with applicable local, state and federal directives, laws and regulations.

This SWMP is intended to be flexible and will be amended as necessary in response to changing needs of MC252 oil spill cleanup response activities. Additional or revised information regarding site-specific waste management activities, procedures, and locations may be provided as revisions to this SWMP to accommodate these needs. Amendments to this plan may occur only upon mutual agreement by BP and the appropriate federal and/or state agencies. The U.S Coast Guard FOSC is the authority to approve changes to the plan. Information that may be amended potentially includes additional management activities, waste staging locations, disposal and/or recycling facilities.

1.2 Waste Management Strategy

Spill cleanup operations may occur along the shorelines and within the Gulf of Mexico. The waste streams generated during cleanup activities will be collected and routed to pre-determined staging areas that have been approved by the Gulf Coast IMT and applicable federal and state regulatory agencies. From the staging areas the waste will be manifested and transported for final disposition to an approved disposal, treatment or recycling facility. Figure 1.1 provides an overview of how cleanup materials and waste flows from onshore and offshore recovery operations to final disposition.

Figure 1.1 Waste and Material Handling Flow Diagram



Notes:
* Liquid waste management is covered in detail in the Liquids Waste and Materials Management Plan included in Appendix A
POTW - Publicly-Owned Treatment Works
NPDES – National Pollution Discharge Elimination System

The following preferred hierarchy of waste and material management will be used, as applicable, during implementation of this SWMP:

	Examples
Source Reduction	Decanting, waste minimization
Reuse/Recycling/Recovery	Use of oil recovery and waste energy facilities
Treatment	Wastewater treatment plant
Disposal	Approved disposal at landfills

The primary goal of this SWMP is to develop a process for managing wastes so as to assist field operations to efficiently collect, contain and remove contaminated materials from affected areas. As a result, volumes generated and operational logistics may not allow for some management options (e.g., reuse/recycling) to be implemented.

However, certain materials collected and/or generated as a result of the cleanup may have recovery (e.g., energy recovery) or recycling value. Recovery, reuse or recycling of contaminated and non-contaminated materials will be evaluated and implemented as applicable and practical.

The protocols and waste management operations plans for proper waste handling, staging, tracking, transporting, and final disposition are described in this document as well as the attached Appendixes. The deliverables that were generated in response to the June 29,

2010 *Recovered Oil, Contaminated Materials, and Liquid and Solid Wastes Management Directives* are as follows:

- Liquid Waste and Materials Management Plan;
- Waste Sampling Plan and Quality Assurance Project Plan;
- Waste and Material Tracking System/Reporting Plan; and
- Community Outreach Plan in support of Waste Management

and are included in the Appendices A through D.

2 MATERIAL / WASTE STREAM IDENTIFICATION & CHARACTERIZATION

2.1 General Materials and Waste Streams

The typical material and waste streams generated by oil spill cleanup activities are described in Table 2.1-1. Estimated generation volume of each reclaimable/recyclable material, recovered oil or cleanup waste type is unknown and will depend on the extent of oil spill impact areas, containment and collection/cleanup operations. Classification of the recyclable/recoverable and waste streams will be determined based on generator knowledge and sampling analysis results. Wastes will be characterized in accordance with analytical and timeframe requirements of the facilities selected for recycling (primarily oil) or waste disposal, as defined in the facility's permit requirements, and in accordance with applicable federal and state regulations.

Resource Conservation and Recovery Act (RCRA) regulations encourage recovery and recycling of oil from cleanup activities by excluding oily solids and liquids that are destined for oil recovery and reuse as product from the definition of solid waste (see 40 Code of Federal Regulations (CFR) Part 261).

In cases where oil contaminated wastes from cleanup activities will be disposed, federal and state regulations exempt most of those wastes from the definition of hazardous waste due to the RCRA exploration and production (E&P) exemption (see 40 CFR 261.4(b)(5)). E&P wastes will be managed in accordance with appropriate state and federal regulations.

Solid wastes that are not recycled and not subject to the E&P exemption will be characterized in accordance with RCRA (see 40 CFR 262.11) and applicable state requirements. Individual state requirements for waste characterization are noted in the attached appendices, as applicable.

Table 2.1-1: General Materials and Waste Streams

Waste Type	Description and Examples	Staging	Disposal
Oily Solids	Oil-contaminated material that may include debris, soil, sand, boom and vegetation; solid weathered oil (e.g., tar balls); oily personal protective equipment (PPE); disposal equipment; sorbents;	Approved staging areas	Appropriate recycling or disposal facility
Non-oily Solids	Non-oiled material that has been recovered from support operations of the cleanup activities, including office trash, non-oiled beach debris, general garbage, non-oiled vegetation	Approved staging areas	Approved disposal facility
Medical Waste	Sharps, syringes, PPE, and other medical-related material generated from operations at wildlife rehabilitation centers or command centers.	Approved staging areas	Approved disposal facility
Oily Liquids	Oil and water mixtures or emulsions (e.g., from skimming or oil recovery operations). Liquids and oily liquids will be managed as described in Liquid Waste and Materials Management Plan included in Appendix A.	Approved staging areas	Appropriate recycling or disposal facility
Liquids	Primarily water that may have an oily sheen or contain minor amounts of free oil droplets (e.g., onshore decanted water, storm water,	Approved staging areas	Appropriate recycling or disposal facility

	decontamination water, treated water)		
Recyclable/ Recoverable Materials	Plastic bottles, hard boom, aluminum cans, scrap metal, glass, cardboard, soft absorbent boom	Approved staging areas	Appropriate recycling/recoverable facility
Incident/field-related Laboratory Waste	Wastes generated by on-site incident-related laboratories, including designated research vessels	Approved onshore staging areas	Approved disposal facility
Hazardous Waste	Non-E&P wastes that are listed hazardous wastes or exhibit hazardous waste characteristics.	Approved staging areas	Approved disposal facility
Animal Carcass	Animal carcasses identified during shoreline cleanup and/or generated from operations at the wildlife rehabilitation centers.	United States Fish and Wildlife Service (USFWS) and/or state fish and wildlife agencies will be responsible for collecting, transporting and disposing of animal carcasses.	
Laboratory Analysis Waste	Analytical samples wastes generated from the analyses of samples at fixed analytical laboratories	Laboratories will manage the disposal of their own lab wastes generated at their facilities	

Materials and wastes will be managed appropriately from the point of generation until the final disposal of the wastes or recycle/reuse of the materials. Table 2.1-2 below presents the general management of the significant spill cleanup waste streams from point of generation through the final disposition (e.g., waste/material management flow).

Table 2.1-2: Waste/Material Management Flow

Generation Location or Retrieval Activity	Waste/Material Type	Verification / Manifesting	Transport	Quantity and Quality?	Disposition
Operations Staging Areas	Solid Wastes	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off box	Generally not sufficient quantity of uniform material to be considered for recycling	Approved landfill
Vessels of Opportunity Deployment Locations	Solid Wastes Oily Solids	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off box	Generally not sufficient quantity of uniform material to be considered for recycling	Approved landfill
On-Shore Decontamination Stations	Solid Wastes Oily Solids Liquids Oily Liquids	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Roll-off box (solids) Vacuum truck (liquids)	Generally not sufficient quantity of uniform material to be considered for recycling	Approved landfill (solids) Approved recycling, treatment, or disposal facility (liquids); water is separated, treated and discharged via POTW.
Shore-line Cleanup Operations	Solid Wastes Oily Solids	On-site consolidation and manifesting, or transfer to waste staging area for further consolidation and manifesting	Roll-off box	Oily solids that are uniform and have sufficient quantity of oil for recovery are sent for recycling	Approved landfill (solids); oily solids may segregated for potential future recovery efforts
Skimming Operations	Oily Solids Liquids Oily Liquids	On-site consolidation, transfer to waste staging area for further consolidation and manifesting	Barge or vessel	Materials that are uniform and have sufficient quantity of oil for recovery are sent for recycling	Approved landfill (solids) Approved recycling facility; oily solids (e.g., sorbent boom) may be centrifuged and separated oil sent for recycling Approved recycling, treatment, or disposal facility (liquids); water is separated, treated and discharged via POTW.

2.2 Material and Waste Sampling and Analysis

Once identified, waste streams are sampled to determine their characteristics and classifications for use by receiving facilities to verify the material meets facility-specific acceptance criteria, and to complete facility-specific waste profiles. Sampling and analysis will also provide additional information to response workers and the public regarding the chemical and physical properties of materials that are generated and managed during oil spill cleanup activities. Details related to methodologies, frequencies, posting requirements, etc. of waste streams are detailed in the Waste Sampling Plan included in Appendix B. In addition, Appendix B includes the Quality Assurance Project Plan, labeled Appendix B-1.

3 WASTE AND MATERIALS MANAGEMENT APPROACH

Waste management contractors, currently Waste Management Inc. (WMI) in Alabama, Mississippi, and Florida as well as Heritage Environmental Services (HES) in Louisiana, are contracted to manage the waste process including:

- Providing labor, materials, and equipment to contain and transport the waste;
- Segregating, and staging wastes;
- Obtaining profiles at approved disposal facilities;
- Obtaining data and determining waste classifications;
- Completing waste transportation manifests or bills of lading;
- Signing waste manifests, under authorization and designated signature authority,
- Completing waste tracking documents, including type and volume of waste generated and disposed.

3.1 Guidelines for Managing Wastes Streams

In general, materials generated from oil spill cleanup activities will be handled as follows:

Waste Minimization and Material Management

- Field crews collecting material should use screening and sorting techniques to minimize the amount of sand collected with oiled material and/or tar balls.
- When possible, reusable containers should be used to collect heavily oiled material (i.e. Tar balls) during clean-up operations instead of plastic bags as they are a hindrance to reuse, recycling or biological remediation options

Material/Waste Accumulation

- Only clean-up contractors that are specifically contracted for this incident shall be allowed to bring waste to the staging areas. If others attempt to deposit non-spill related waste at the staging areas they shall be immediately turned away by security personnel.
- Containers containing waste or recyclable materials should only be stored at approved staging sites
- Liquids, such as oily water, decontamination water and stormwater, should be transported by vacuum tanks and staged in frac tanks.
- Prior to storage of solid materials, containers should be lined and absorbent materials will be put along seams, if needed. Roll-off containers containing waste or recyclable material should be covered (tarped) when not actively being loaded and during transportation.
- Upon receipt of a container at a staging area, the containerized waste or material should be identified as waste to be routed for disposal or material to be routed for recycling/reuse/recovery. The material's classification will be based on process/generator knowledge or previously completed waste profiles.

Material/Waste Management

- Partially-filled and filled containers should be labeled and routinely inspected to assess their condition.

- In the event a leak is observed, the following should take place:
    - Source of leak should be determined and corrected utilizing a visual inspection.
    - Utilize standard spill cleanup materials and equipment (i.e. shovel and absorbents).
    - Any remaining impacted soil should be excavated, containerized and properly disposed.
- If required by applicable regulations, frac tanks and roll-off containers should have spill containment. If 55-gallon containers are used, they will be U.S. Department of Transportation (DOT) approved and have secondary containment, if required.
- Spill Control and Countermeasures Plans (SPCC) are prepared or under development for those sites subject to 40 CFR 112.1 and equivalent state requirements.
- Containers with oil residue on the exterior should be manually cleaned or transferred to a decontamination station for cleaning.

Manifesting and Transportation

- Once a container is considered full, the container should be properly covered and labeled for transportation. Transportation should be arranged by the waste management company. Shipping documents should be prepared and signed by authorized designees. Where applicable, storage time of roll-off containers (when full) will not exceed 45 days, and should be removed as quickly as practical.
- A manifest or bill of lading and relevant paperwork should be prepared and reviewed for completeness prior to transportation. The manifest or bill of lading should be signed by BP as generator of the waste or an authorized BP agent. BP has authorized HES and Environmental Resources Management (ERM) representatives to sign manifests on behalf of BP (see Appendices E through H for Waste Manifest Signature Delegation Authority agreements).
- Following manifest or bill of lading activities, properly credentialed driver should be assigned to transport the load and provided with completed paper work.

3.2 Staging Areas

Staging areas have been identified to support the cleanup operations associated with this incident. The areas are divided by function and include equipment staging, waste staging, and decontamination work areas. The typical work force staffing for a staging area should include the following staff:

- Staging Site Manager;
- Waste Management Contactor staff
- Safety Representative;
- Security Personnel, staging areas will have 24-hour, 7 day a week security personnel; and
- Other personnel as needed based on the site specific activities.

Additional staging, decontamination stations and disposal/recycling sites may need to be added or closed due to changes in response activities. Lists of approved staging locations that are currently operational or may be soon are provided by state in Appendices E through I.

Permits and approvals that are required to site and operate temporary staging and decon station areas that support response operations will be followed.

Hydrogen Sulfide (H2S), poses a risk to personnel when found at high concentrations. The primary concern is the potential presence of H2S in some of the roll-off containers related to the MC252 Spill Response. Over time materials, when left in a closed container, can generate quantifiable levels of H2S.

The current levels of exposure for H2S that are permitted are no greater than 20 parts per million (ppm) ceiling limit for a normal work period with the following exception, if no other measurable exposure occurs during the normal work day, exposure may exceed 20 ppm but may not exceed 50 ppm for a single time period of greater than 10 minutes. In consultation with the site Health and Safety Specialist, a review of the waste staging area should be conducted to provide a determination as to H2S levels, and what steps should be followed if any, which could include:

1) Containers to be vented 30 minutes prior to shipping to decrease the likelihood of transport truck driver or landfill employee exposure when the containers are emptied.
2) If determined that there is a need, roll-off containers will be screened to determine if H2S readings are at or above prescribed limits.
3) If elevated concentrations are identified during the screening H2S personal monitors will be used by the drivers and workers in the waste staging area

At the conclusion of use, staging areas will be closed following local and state requirements. The specifics of this program will be developed separate from this SWMP.

3.3 Tracking/Reporting

A data management system will be used to track waste characterization documentation, waste profiles, waste manifests, and bills of lading. Waste that is handled at each waste staging area is tracked daily by individual state and waste staging area location, and the information is used to provide updates to the daily ICS-209 Form. Recyclables/recoverables are also tracked and documented. Waste and material tracking information is regularly reported on BP's website. A detailed description of the Tracking System/Reporting Plan is included in Appendix C.

3.4 Final Disposition of Wastes

Only licensed or permitted waste management and disposal, or recycling facilities (with the exception of recycling facilities for common items such as plastic water bottles, aluminum cans, cardboard, etc) that are listed in the state-specific appendices of this SWMP will be used. Special arrangements and the necessary approvals will be obtained for county or municipal disposal facilities (as identified by local and state officials) prior to use, as required.

4 HEALTH AND SAFETY

Health and safety considerations will be covered under separately developed Site-specific Safety Plans. These plans will be available onsite for staff and visitors to review.

5 COMMUNITY RELATIONS

Community relations are vital to properly manage any community issues or concerns that arise in connection with handling oil spill cleanup-related wastes associated with MC 252 incident. With this in mind, a Community Outreach (CO) Program has been developed to engage local communities. A *Community Outreach Plan in support of Waste Management*, was developed is response to the June 29, 2010 waste deliverables and is included in Appendix D.

To the extent feasible, impacts on minority and low income populations will be reviewed when selecting future staging areas and disposal options. The Gulf Coast IMT has a commitment to address environmental justice challenges and the disproportionate environmental burdens placed on low-income and minority communities as directed by applicable legal requirements. The Gulf Coast IMT will strive to minimize the impacts of waste management logistics and operations on communities near those operations. Planning may include the following based on information provided by the US Environmental Protection Agency (EPA):

- Analysis of socio-economic demographic data within close proximity to operations;
- Evaluation of any potential impacts on sensitive populations; and,
- Evaluation of any pre-existing community concerns and regulatory enforcement history.